GAVRILOV, Anatoliy Nikolayevich, ed.

Sovremennoye sostoyaniye i naprovleniya razvitiya tekhnologii mashinostroyeniya i priborostroyeniya. Moskva, Mashgiz, 1960.
563 p. ilus., diagrs., graphs, tables.
Includes bibiographies.

GAVRILOV, A.N.

PHASE I BOOK EXPLOITATION SOV/4397

Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti

Priborostroyeniye i izmeritel'naya tekhnika (Instrument Manufacture and Measurement Technique) Moscow, Mashgiz, 1960. 462 p. Errata slip inserted. 3,000 copies printed.

Ed.: A.N. Gavrilov, Doctor of Technical Sciences, Professor; Tech. Ed.: A. Ya. Tikhanov; Managing Ed. for Literature on Machine and Instrument Construction (Mashgiz): N.V. Pokrovskiy, Engineer.

PURPOSE: This collection of articles is intended for scientific and technical personnel in the instrument industry.

COVERAGE: The 23 articles deal with the present state and the outlook for the development of instrument manufacture and measurement technique. New problems of design, construction, and manufacture of instruments are discussed in the first two sections. Emphasis is given to problems of automation and mechanization of production and to the application of new techniques in program control, ultrasonics, and chipless working of metals. The third section deals with new measurement methods involving the use of ultrasonics and radio isotopes. Some theoretical aspects of metrology and measurement technique are also discussed in this section. No personalities are mentioned. References accompany several of the articles.

Card 4/6

(19)

GAVRILOV, A.N., prof., doktor tekhn.nauk; DEM'YANYUK, F.S., prof., doktor tekhn.nauk; MITROFANOV, S.P., kand.tekhn.nauk; KORSAKOV, V.S., prof., doktor tekhn.nauk; IVANOV, D.P., doktor tekhn.nauk; STOROZHEV, M.V., kand.tekhn.nauk; MALOV, A.N., kand.tekhn.nauk; KUDRYAVTSEV, I.V., prof., doktor tekhn.nauk; SHNEYDER, Yu.G., kand.tekhn.nauk; SHUKHOV, Yu.V., dotsent; KAZAKOV, N.F., kand. tekhn.nauk; ZOLOTYKH, B.N., kand.tekhn.nauk; ROZENBERG, L.D., prof., doktor tekhn.nauk; YAKHIMOVICH, D.Ya., inzh.; NIKOLAYEV, G.A., prof., doktor tekhn.nauk; VLADZIYEVSKIY, A.P., doktor tekhn. nauk; SHAUMYAN, G.A., prof., doktor tekhn.nauk; KOSHKIN, L.N., kand.tekhn.nauk; BOBROV, V.P., kand.tekhn.nauk; NOVIKOV, M.P., kand.tekhn.nauk; VIKHMAN, V.S., kand.tekhn.nauk; DERBISHER, A.V., kand.tekhn.nauk; KLIMENKO, K.I., prof., doktor ekonom.nauk; VYATKIN, A.Ye., inzh.; SATEL', E.A., prof., doktor tekhn.nauk; FOFANOV, I.G., inzh.; MATVEYENKO, V.V., inzh.; KOCHETOVA, G.F., inzh., red.izd-va; EL'KIND, V.D., tekhn.red.; TIKHANOV, A.Ya., tekhn.red.

[Present status and trends of future development of technological processes in the manufacture of machinery and instruments] Sovremennoe sostoianie i napravleniia razvitiia tekhnologii mashinostroeniia i priborostroeniia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 563 p. (MIRA 13:7)
(Machinery industry--Technological innovations)
(Instrument manufacture--Technological innovations) (Automation)

S/115/60/000/06/28/031
B007/B014

AUTHORS: Arutyunov, V. O., Gavrilov, A. N.

TITLE: International Scientific and Technical Conference on Measuring Technique and Instrument Construction (IMEKO) in 1961

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 6, pp. 61-62

TEXT: The First International Scientific and Technical Conference on Measuring Technique and Instrument Construction (IMEKO) was held in Budapest in November, 1958. It was organized by the Hungarian Scientific Society of Measuring Technique and Automation (MATE), the Polish Scientific and Technical Society (NOT), and the NTO Priborprom SSSR (NTO Priborprom USSR). It was attended by delegates from 18 countries. The Soviet delegation delivered 16 lectures out of 150. The proceedings of the Conference were published in "Acta IMEKO" (five volumes). At the end of 1959, more than 15 countries joined the International Organizing Committee, which held a meeting in Budapest from February 10 to 14, 1960, at which its composition was approved: representatives of Britain, Belgium, Bulgaria,

Card 1/3

International Scientific and Technical Conference on Measuring Technique and Instrument Construction (IMEKO) in 1961

S/115/60/000/06/28/031
B007/B014

Hungary, Eastern Germany, Denmark, Italy, Red China, Poland, Roumania, USSR, Czechoslovakia, and Sweden. The representatives of Austria, Albania, India, USA, France, German Federal Republic, and Yugoslavia are present at the Committee, but without a vote. At the suggestion of the Hungarian Society MATE, the Conference will take place in Budapest from June 15 to July 15, 1961. The following program was drawn up: The most important general lectures, lectures on important problems of measuring technique and instrument construction, and summarizing reports will be delivered at the Plenary Meetings. Lectures of general interest will be held at the Section of Calculation and Construction of Instruments, at the Section of Technology and Organization of Production, and at the Section of Electronic Devices. The work of the Section of Secondary Problems in Measuring Technique and Automation will be prepared in cooperation with the Technical Committee of the IFAC (International Federation of Automatic Control). The other seven sections will discuss instruments and techniques for the measurement of geometrical and mechanical quantities, time and frequency, heat-engineering quantities, ionizing radiation, instruments and techniques for physicochemical, electrical, magnetic, and radiotechnical measurements.

Card 2/3

International Scientific and Technical Conference on Measuring Technique and Instrument Construction (IMEKO) in 1961

S/115/60/000/06/28/031
B007/B014

Languages at this Conference: English, German, Russian, and French. The lectures should be submitted in at least two languages (in duplicate). The lectures of Soviet scientists and engineers should be submitted to the District and Republic Administrations of NTO Priborprom. A Sovetskiy komitet IMEKO (Soviet Committee IMEKO) was established by the Presidium of NTO Priborprom for the preparation of this Conference.

Card 3/3

ARUTYUNOV, V.O.; GAVRILOV, A.N.

Second International Conference on Measuring Equipment and Instrument Manufacture. Izm.tekh. no.10:60-61 O '61. (MIRA 14:11)
(Measuring instruments)

PHASE I BOOK EXPLOITATION SOV/6143

Gavrilov, Anatoliy Nikolayevich, Doctor of Technical Sciences, Professor

Tekhnologiya aviatsionnogo priborostroyeniya (Technology of Aviation Instrument Making). 2d ed., rev. and enl. Moscow, Oborongiz, 1962. 472 p. 12,000 copies printed.

Ed.: P. I. Bulovskiy, Doctor of Technical Sciences, Professor; Ed. of Publishing House: N. A. Gortsuyeva; Tech. Ed.: V. I. Oreshkina; Managing Ed.: S. D. Krasil'nikov, Engineer.

PURPOSE: This textbook is intended for students of instrument making in aviation schools of higher technical education; it may also be useful to engineers and technicians working in industry.

COVERAGE: Fundamentals in the planning of manufacturing processes applicable to the conditions and characteristics of aviation instrument making are presented, as well as the production technology of ordinary and special parts and the assembly of aviation

Card 1/5

instruments. Particular attention is paid to problems of instrument quality and to increasing the economy of manufacture through the use of advanced production processes resulting from the wide-scale introduction of automation and mechanization. The book contains collected and systematized material which reflects the results of investigative study and production experience in various branches of Soviet and non-Soviet instrument making. No personalities are mentioned. There are 70 references: 47 Soviet, 14 English, 8 German, and 1 French.

TABLE OF CONTENTS [Abridged]:

GAVRILOV, A.N.

Results of the work and the objectives of the Scientific Technological Society of the Instrument Industry. Priborostroenie no.4:1-3 Ap '62. (MIRA 15:4)
(Instrument industry--Technological innovations)

GAVRILOV, A.N.

Present status and future development of technological processes in the instrument industry. Priborostroenie no.9:1-3 S '62. (MIRA 15:9)

(Instrument industry)

ZOTOV, V.P.; SILUYANOV, V.G.; GUGINA, Ye.F.; AUERMAN, L.Ya.; ALEKHINA, M.S.; BEZZUBOV, A.D.; BODROV, V.A.; BUDNYY, A.V.; BURTSEV, Ye.L.; VAYNSHTEYN, V.O.; GAVRILOV, A.N.; GORBATOV, V.M.; GRITSENKO, N.N.; DOLGUSHEVA, L.I.; YEDYGENOV, K.Ye.; ZHURAVLEVA. S.S.; ZACHESKIN, Ya.A.; IVKIN, A.P.; IZOTOV, A.K.; IL'INSKIY, N.A.; IRINARKHOVA, A.M.; KARPENKO, A.K.; LYSOGOR, P.M.; LUPISH, A.T.; OLEYNIKOV, V.V.; ORANZHEREYEVA, V.F.; PETROV, N.A.; PYATIBRATOV, M.A.; ROMANOV, A.N.; RAUBE, P.V.; RYZHENKO, L.P.; SEMYKIN, A.A.; SHEFER, A.P.

G.IA.Ivanov; obituary. NTO 4 no.10:39 O '62. (MIRA 15:9)
(Ivanov, Georgii IAkovlevich, 1897-1962)

GAVRILOV, A.N., doktor tekhn.nauk, prof.; KOVALEV, P.I.; KHOKHLOV, B.A.; ZHERDEV, N.F.; KASPEROVICH, N.S., inzh., red; SMIRNOVA, G.V., tekhn. red.

[Album of attachments for machine tools used in the manufacture of instruments] Al'bom prisposoblenii dlia metallorezhushchikh stankov, primeniaemykh v priborostroenii. Pod red. A.N.Gavrilova. Izd.2., ispr. i dop. Moskva, Mashgiz, 1963. 216 p. (MIRA 16:7)

(Machine tools—Attachments)

DANILEVSKIY, Vladimir Viktorovich; GAVRILOV, A.N., prof., doktor tekhn. nauk, retsenzent; KHOLIN, V.A., inzh., retsenzent; KUNIN, P.A., red.; VARGANOVA, A.N., red.izd-va; MURASHOVA, V.A., tekhn. red.

[Technology of the manufacture of machinery; general course] Tekhnologiia mashinostroeniia; obshchii kurs. Moskva, Vysshaia shkola, 1963. 505 p. (MIRA 17:2)

AM4016086 BOOK EXPLOITATION S/

Gavrilov, A. N.; Ushakov, N. N.; Tsvetkov, N. M.

Technology of Aviation Electrical Equipment (Tekhnologiya aviatsionnogo elektrooborudovaniya), Moscow, Oborongiz, 1963, 523 p., illus., biblio. Errata slip inserted. 10,000 copies printed.

TOPIC TAGS: electrical equipment, casting, cold stamping, hot stamping, plastic, ultrasonic treatment, machining, coating, bushing, gear, threaded part, spring, housing, permanent magnet, winding, rotor, assembly, automation

PURPOSE AND COVERAGE: The book presents the basic problems of designing the technological processes applicable to aviation electrical equipment construction, the technology of fabricating standard and special components, problems of assembly, mounting, and inspection of aircraft electrical equipment. It reflects the experience of domestic and foreign electrical equipment construction and the results of certain research. Great attention is given to raising the quality and lowering the cost of making components by using progressive technological processes, mechanization and automation. The book is a text for students in aviation higher educational institutions and departments and can be useful for workers in industry.

Card 1/4

BALAKSHIN, O.B., kand. tekhn. nauk; BYKHOVSKIY, M.L., prof., doktor tekhn. nauk; VOLODIN, Ye.I., kand. tekhn. nauk; GRIGOR'YEV, I.A., kand. tekhn.nauk; DRAUDIN-KRYLENKO, A.T., inzh.; IVANOV, A.G., kand. tekhn.nauk; KOZLOV, M.P., kand. tekhn. nauk; KOROTKOV, V.P., prof.; KOCHENOV, M.I., kand. tekhn.nauk; KUTAY, A.K., kand. tekhn. nauk; MARKOV N.N.,kand. tekhn. nauk; PALEY, M.A., inzh.; RAYBMAN, N.S., kand. tekhn.nauk; ROSTOVYKH, A.Ya., kand. tekn. nauk; RUMYANTSEV, A.V., kand. tekhn.nauk; SARKIN, I.G., prof.; SMIRNOV, A.S., inzh.; TAYTS, B.A., prof., doktor tekhn. nauk; YAKUSHEV, A.I., prof., doktor tekhn. nauk; NESTEROV, V.D., inzh., nauchnyy red.; CHUDOV, V.A., inzh., nauchnyy red.; GAVRILOV, A.N., doktor tekhn.nauk, prof., red.; BLAGOSKLONOVA, N.Ya., [illegible] red. izd-va; SOKOLOVA, T.F., tekhn. red.

[Manufacture of instruments and means of automatic control: a manual in five volumes] Priborostroenie i sredstva avtomatiki; spravochnik v piati tomakh. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry. Vol.1.[Interchangeability and engineering measurements] Vzaimozameniaemost' i tekhnicheskie izmereniia. 1963. 568 p. (MIRA 16:8)
(Electronic measurements) (Automatic control)

GAVRILOV, Anatoliy Nikolayevich, doktor tekhn. nauk, prof.

Instrument industry today and tomorrow. NTO 5 no.11:13-15 N '63. (MIRA 16:12)

1. Predsedatel' TSentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti.

GAVRILOV, A. N.

"The general status and the technical-scientific problems of manufacturing accuracy in the instrument industry."

report submitted for the 3rd Intl Measurement Conf & 6th Intl Instruments & Measurements Conf, Stockholm, 14-19 Sep 64.

GAVRILOV, A.N., doktor tekhn. nauk, prof., otv. red.; YAKUSHEV, A.I., doktor tekhn. nauk, prof., otv. red.; BURDUN, G.D., doktor tekhn. nauk, prof., otv. red.; DIKUSHIN, V.I., akademik, red.

[Precision, interchangeability and industrial measurements in the manufacture of machinery; transactions] Tochnost', vzaimozameniaemost' i tekhnicheskie izmereniia v mashinostroenii; trudy. Moskva, Izd-vo "Nauka," 1964. 386 p. (MIRA 17:6)

1. Soveshchaniye po tochnosti, vzaimozamenyayemosti i tekhnicheskim izmereniyam v mashinostroyenii. 2d, 1962.

GAVRILOV, A.N.

Present state and scientific-technical problems of the technology of instrument manufacture. Priborostroenie no.2:3-4 F '64. (MIRA 17:3)

GAVRILOV, A.N.

Participation of voluntary organizations in the realization of scientific and technical development in the instrument industry. Priborostroenie no.3:1-3 Mr '64. (MIRA 17:6)

1. GAVRILOV, A. P.

2. USSR (600)

4. Pine - Yul'yanov Province

7. Growth of pine plantings according to forest type on the right bank of the Volga in Yul'uanov Province. Les. khoz. 6 No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

TORNUSHENKO, I.G., akkumulyatorshchik; GAVRILOV, A.P., akkumulyatorshchik.

Our method of reconditioning storage batteries. Elek. i tepl. tiaga no.3:32-33 Mr '57. (MLRA 10:6)

1. Elektrodepo, Leningrad. Finlyandskoy Oktyabr'skoy dorogi.
(Storage batteries)

GAVRILOV, A. P., Engr. PA 152T27

USSR/Engineering - Welding Equipment Oct 49

"Welding of Important Structures at the Staro-Kramatorsk Machine-Building Plant imeni Ordzhonikidze," A. P. Gavrilov, Engr, 5 1/2 pp

"Avtogen Delo" No 10

Describes use of welding in following fields: building structures, cranes, gears, rolling equipment, forging and press equipment, metallurgical equipment, pit head gear, hydraulic engineering installations, boilers, and reservoirs. Includes three drawings, and ten photographs.

152T27

GAVRILOV, A. P.

Izgotovienie barabana shakhtnoi elektropod"emnoi mashiny. (Vestn. Mash., 1950, no.8, p. 46-47)

Refers to "Staro-Kramatorskii" plant.

Manufacturing the drum of an electric mine hoisting machine.

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

GAVRILOV, A.P.

USSR/Engineering - Welding May 51

"Constructing the Welded Bridge of an Ore-Coal Reloader," A. P. Gavrilov, Engr

"Avtogen Delo" No 5, pp 14-18

Reloader designed as bridge crane was constructed for the 1st time by welding method, at Staro-Kramatorsk Mach Bldg Plant imeni Ordzhonikidze in 1948. Bridge length is 137.35 m. Productive capacity 500 tons/hr of ore and 400 tons/hr of coal. Describes procedure of fabrication and outlines shortcomings, eliminated in construction of subsequent bridges.

200T30

GAVRILOV, A. P., Eng.

Welding of metal construction at the Ordzhonikidse SKMZ plant. Avtog. delo 23, No 5, 1952.

GAVRILOV, AP. , SERDYUKOV, P. I.

Work experience of the welders of the plant department of the Scientific Institute of the Society of Engineers and Technicians at the Ordzhonikidze SKMZ plant. Avtog. delo. 23, No 5, 1952.

GAVRILOV, A.P., inzhener.

Production of welded locomotion mechanisms for ore and coal loaders at the Ordzhonikidze SKMZ. Vest.mash.34 no.1:83-85 Ja '54. (MLRA 7:2)
(Mining machinery)

SHEYDIN, Ya.G.; BOYDA, Sh.A.; GAVRILOV, A.P.

Use of borehole radiometric surveys in searching for some types of rare metal deposits. Razved. i okh. nedr 26 no.7:48-51 Jl '60. (MIRA 15:7)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Metals, Rare and minor) (Radioactive prospecting)

PLETNEVA, N.I.; YELINA, N.A.; DENISOV, A.P.; GAVRILOV, A.P.

Accessory rare-earth silicate-apatite from pegmatites. Mat. po min. Kol'. poluost. 2:123-132 '62. (MIRA 16:4)

(Kola Peninsula—Apatite)
(Kola Peninsula—Pegmatites)

CA

24

New method for regulating the consistency of paper pulp

A. S. Gavrilov. *Bumazh. Prom.* 26, No. 6, 12-16(1951)

A friction-screw type of consistency regulator (I) for paper-machine furnish is described. The theory of operation of I, a general description of its construction, and its application in a typical newsprint-mill operation are given. Mill trials on the use of I for various types of furnish showed that the variation in pulp consistency to the paper machines was not more than 0.12%, giving a basis wt. variation of ±1.5%. In one example, the consistency of the pulp in the blending tanks (50% chem. and 50% mech. pulp) varied from 3.2 to 1.2 and the basis wt. of the sheet (in g./sq. m.) from 129 to 132.

John Lake Keays

GAVRILOV, A.S.

Viscosimeter for determining fiber grinding in paper pulp.
Bum. prom. 36 no.11:26-27 N '61. (MIRA 15:1)
(Viscosimeter)
(Papermaking machinery)

GAVRILOV, A.S., podpolkovnik meditsinskoy sluzhby; TSIVILASHVILI, A.S., kand. med.nauk, podpolkovnik meditsinskoy sluzhby; SHAPOSHNIKOV, A.I., kand. tekhn.nauk, inzh.-podpolkovnik

Fitting of the pressure suit. Voen.-med.zhur. no.1:65-67 '65.
(MIRA 18:10)

GAVRILOV, A. V.

USSR/Miscellaneous - Contests

Card 1/1 Pub. 133 - 18/23

Authors : Gavrilov, A. V., and Kanevsky, S. G.

Title : Results of a contest for the best suggestions in the field of communications

Periodical : Vest. svyazi 8, 26-27, Aug 1954

Abstract : The results of the 1954 annual technical contest arranged by the Ministry of Communications for the best suggestions made in the communications field are described. The majority of suggestions were made in the field of telegraph communications and radio broadcasting; improved methods applicable to intra-regional communications also were proposed. Prize-winning suggestions and winners are listed.

Institution : ...

Submitted : ...

GAVRILOV, A.V.; KANEVSKIY, S.G.

Results of the All-Union public review of efficiency work conducted in district communications offices. Vest.sviazi 14 no.4:29-30 Ap '54. (MLRA 7:6)

(Telecommunication)

KANEVSKIY, S.G., otvetstvennyy red.; GAVRILOV, A. V., red.; KHELEMSKAYA, L.M., tekhn. red.

[Efficiency promoters in regional communications centers] Ratsionalizatory raionnoi kontory sviazi. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1955. 33 p. (MIRA 11:9)
(Telecommunication)

GAVRILOV, N. V.

AFANAS'YEV, Aleksandr Porfir'yevich; GUSEV, Simon Stepanovich; KRISTAL'NYY, Vladimir samoylovich; RAMENSKIY, Boris Nikolayevich, redaktor; ROZENBERG, Yakov Grigor'yevich; SILIN, Konstantin Fedorovich; GAVRILOV, A.V., redaktor; SOKOLOVA, R.Ya., tekhnicheskiy redaktor.

[Establishing electric and radio communication facilities in the district] Ekspluatatsiia sredstv elektrosviazi i radiofikatsii v raione. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1955. 187 p. (MLRA 8:12)
(Telecommunication) (Radio)

GAVRILOV, A.V.

Conducting a competition for the best suggestion in the communication field. Vest.sviazi 15 no.9:26-27 S'55. (MLRA 8:12)

1. Nachal'nik otdela izobreteniy Tekhnicheskogo upravleniya Ministerstva svyazi SSSR.

(Telecommunication)

GAVRILOV,A V., inzhener.

Administrative aspects of inventions procedures and efficiency promotion in communication enterpirses. Izobr. v SSSR.1 no.2:19-21 Ag '56. (MLRA 10:3)
(Telecommumication)

GAVRILOV, A.V.

Remove shortcomings in the organization of efficiency innovators' work in communications enterprises. Vest.sviazi 16 no.7:30-31 Jl '56. (MLRA 9:9)

1.Nachal'nik otdela izobreteniy Tekhnicheskogo upravleniya Ministerstva svyazi SSSR.
(Telecommunication)

GAVRILOV, A.V.; KANEVSKIY, S.G.

Multiply the ranks of communications innovators. Vest. sviazi 17 no.5:27 My '57. (MLRA 10:5)

1. Nachal'nik otdela izobretennyy Ministerstva svyazi SSSR (for Gavrilov). 2. Zamestitel' predsedatelya komissii po massovomu rabochemu izobretatel'stvu i ratsionalizatsii TSentral'nogo komiteta profsoyuza rabotnikov svyazi (for Kanevskiy).
(Telecommunication)

GAVRILOVA

KAMENSKIY, S.G.; [illegible], M.D.; GAVRILOV, A.V.

Efficiency [illegible]ion in communications enterprises in the Urals, Siberia and the Far East. Vest.svyazi 17 no.6:26-27 Je '57. (MIRA 10:8)

1.Zamestitel' predsedatelya Komissii po massovomu izobretatel'stvu i ratsionalizatsii TSentral'nogo komiteta profsoyuza svyazi (for Kamenskiy) 2.Nachal'nik Tekhnicheskogo otdela Ministerstva svyazi RSFSR (for Kamenskiy) 3.Nachal'nik otdela izobreteniy Ministerstva svyazi SSSR (for Gavrilov).

(Siberia--Telecommunication)

AUTHOR: Gavrilov, A.V.

111-58-6-17/25

TITLE: Keep on Improving the Rationalization Work in Communication Establishments (Neustanno uluchshat' ratsionalizatorskuyu rabotu na predpriyatiyakh svyazi)

PERIODICAL: Vestnik Svyazi, Nr 6, 1958, p 27 (USSR)

ABSTRACT: More than 300 lectures on communication techniques were given in BSSR communication establishments during one year with the assistance of the Belorussian branch of the Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi imeni A.S. Popova (The Scientific Technical Association of Radio-Technics and Electrocommunications imeni A.S. Popov). Totals given by the author show that a 3 month contest resulted in an increase of rationalization suggestions.

ASSOCIATION: Otdel izobreteniy tekhnicheskogo upravleniya (The Invention Department of the Technical Administration) of the USSR Ministry of Communications

Card 1/1 1. Communications - USSR 2. Communications - Technique

SHIPKOV, N.N.; GAVRILOV, A.V.

Stabilization process in the suspended layer of a polydisperse system. Nauch.dokl.vys.shkoly; energ. no.1:103-108 '59.
(MIRA 12:5)

1. Rekomendovana kafedroy tekhnologii vody i topliva Moskovskogo energeticheskogo instituta.
(Colloids)

6 (2)

SOV/111-59-4-17/25

AUTHOR: Gavrilov, A. V., Chief

TITLE: The Creative Thoughts of Inventors and Efficiency Experts Must Serve the Seven-Year Plan (Tvorcheskuyu mysl' izobretateley i ratsionalizatorov - na sluzhbu semiletke)

PERIODICAL: Vestnik svyazi, 1959, Nr 4, p 26 (USSR)

ABSTRACT: Problems of the further development of inventions and efficiency suggestions will be discussed at the congress of the Vsesoyuznoye obshchestvo izobretateley i ratsionalizatorov (All-Union Society of Inventors and Efficiency Experts must) which will take place in May, 1959. The author repeats the tasks of the Seven-Year Plan which are to be achieved by the communication workers, and emphasizes that in the overwhelming majority of new devices, the inventions and suggestions of communication workers were used. The work of these inventors is of great importance to the Seven-Year Plan. In 1958, about 50,000, or 84%, out of a total of 55,900 suggestions of communication employees were realized.

Card 1/2

SOV/111-59-4-17/25

The Creative Thoughts of Inventors and Efficiency Experts Must Serve the Seven-Year Plan

ASSOCIATION: Otdel izobreteniy Tekhnicheskogo upravleniya Ministerstva svyazi SSSR (Section for Inventions of the Technical Administration of the USSR Ministry of Communications).

Card 2/2

TARAKANOVA, M.S., starshiy inzh.; GAVRILOV, A.V.

Automatic control in telephone and telegraph communications; scientific and technical conference of the communication workers of Kazakhstan and Central Asia. Vest. sviazi 21 no.9:17-18 S '61. (MIRA 14:9)

1. Glavnoye upravleniye mezhdugorodnoy telegrafno-telefonnoy svyazi Ministerstva svyazi SSSR. 2. Nachal'nik otdela izobreteniy Tekhnicheskogo upravleniya Ministerstva svyazi SSSR (for Gavrilov).

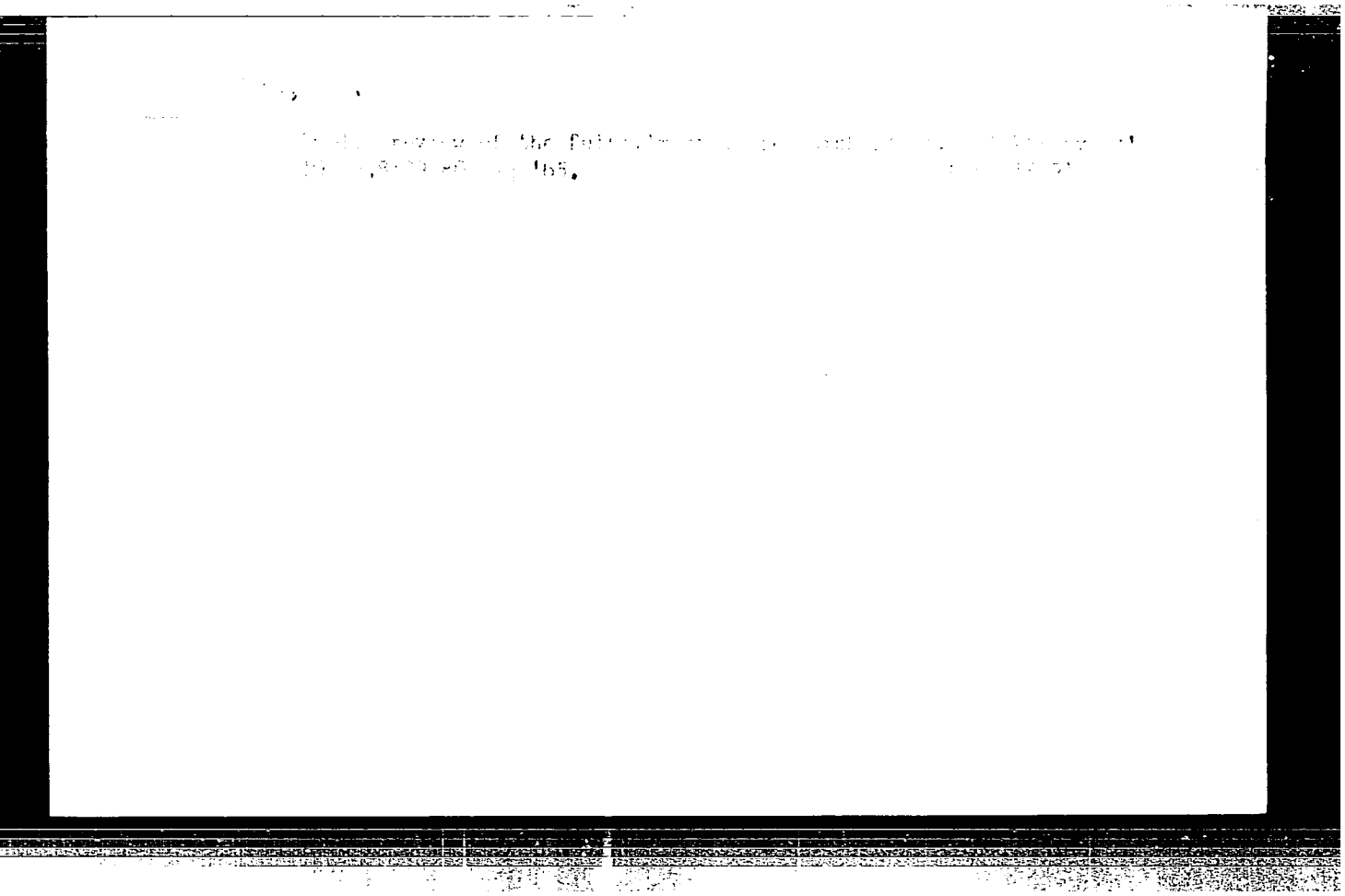
(Telecommunication—Employees)
(Telephone—Congresses) (Telegraph—Congresses)

GAVRILOV, A.V.

More actovo participation in the creation and use of new equipment in industry. Radiotekhnika 19 no.11:71-72 N '64.

(MIRA 18:2)

1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni A.S Popova.



GAVRILOV, A.K.

Practical work of the A.S.Popov Scientific and technical Society of Radio and Electronics. Vest. sviazi 25 no.7:29-30 Jl '65. (MIRA 18:8)

1. Zamestitel' predsedatelya Tsentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi im. A.S.Popova.

GAVRILOV, A.V.

Twentieth anniversary of the A.S. Popov Scientific and Technical Society of Radio and Electronics. Elektrosvyaz' 19 no. 12:1-4 D '65 (MIRA 19:1)

GAVRILOV, A. Ya.

GAVRILOV, A. Ya. - "Certain Geochemical Characteristics of the Oil Deposits of the Apsheron Peninsula." Sub 19 Dec 52, Moscow Order of Lenin State U imeni M. V. Lomonosov. (Dissertation for the Degree of Candidate in Geological and Mineralogical Sciences).

SO: Vechernaya Moskva, January-December 1952

GAVRILOV, A.Ya.; DRAGUNSKAYA, V.S.

Condensate with an aromatic base found in eastern Turkmenistan. Izv.AN Turk.SSR.Ser.fiz.-tekh., khim.i geol.nauk no.3:111-113 '63. (MIRA 17:3)

1. Turkmenskiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

GAVRILOV, A.Ye.; ROSSOVA, S.M., redaktor; POPOV, N.D., tekhnicheskiy redaktor

[Operation of small capacity hydroelectric power stations] Ekspluatatsiia elektrostantsii maloi moshchnosti. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geologii i okhrane nedr, 1954. 15 p. (MLRA 8:1)

(Hydroelectric power stations)

GAVRILOV, A.Ye.; ROSSOVA, S.M., redaktor; POPOV, N.D., tekhnicheskiy redaktor.

[Operation of low-capacity electric power stations] Ekspluatatsiia elektrostantsii maloi moshchnosti. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geologii i okhrane nedr, 1954. 14 p.(MLRA 7:11)
(Electric power plants)

GAVRILOV, A.Z

14(5) SOV/92-59-1-28/36

AUTHOR: None given

TITLE: (Photograph by A. Bryanov, TASS photographer)

PERIODICAL: Neftyanik, 1959, Nr 1, p 32 (USSR)

ABSTRACT: This photograph, reproduced under the heading "Automatic Device for Pumping Petroleum Out of a Gaging Tank", shows A.Z. Gavrilov, operator of the Mukhanovo oilfield. He is controlling the operation of the automatic device introduced by the Pervomayneft' Administration for pumping petroleum out of a gaging tank.

Card 1/1

GAVRILOV, B.

"Influence of rosin extraction on growth" Tr. from the Russian p. 89.
(Analele Romano-Sovietice. Seria Silvicultura-Industrial Lemnului Si Hartieli.
Series a II-a, vol. 7, no. 16, Nov./Dec. 1952. Bucresti.)

EAST EUROPEAN Vol. 2, No 9
SO: Monthly List of XXXXXXX Accessions, Library of Congress, September 1953, Uncl.

GAVRILOV, B.; LADIYEV, R.; LOBURENKO, A.; CHUGAY, A.; SHUGUROV, V. (Kiyev)

Use of new technology reduces fire hazards. Pozh.delo 6 no.10:28 O '60. (MIRA 13:10)
(Rubber industry—Fires and fire prevention)

GAVRILOV, B.

Students acquire trade vocations. Sov.torg. 34 no.5:35-38 My '61.
(MIRA 14:5)

1. Nachal'nik upravleniya uchebnykh zavedeniy Ministerstva torgovli RSFSR.

(Distributive education)

GAVRILOV, Boris Aleksandrovich, kand. istor. nauk; KAPLUNOV, A.S., red.; BERLOV, A.P., tekhn. red.

[Struggle of the Communist Party to strengthen the union of working class and peasantry during the restoration of the national economy 1921-1925] Bor'ba Kommunisticheskoi partii za ukreplenie soiuza rabochego klassa s krest'ianstvom v period vosstanovleniia narodnogo khoziaistva (1921-1925 gg.). Moskva, Izd-vo "Znanie," 1958. 45 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser. 1, no.21). (MIRA 11:10)
(Russia--Economic policy)

NAYDICH, I.M., kand. tekhn. nauk; [illegible], kand. tekhn. nauk; GAVRILOV, B.A., inzh.

Present-day highly efficient crushing equipment. Stroi. mat. 10 no.2:35-38 F '64. (MIRA 17:6)

ACC NR: AT6036616 SOURCE CODE: UR/0000/66/000/000/0300/0302

9

AUTHOR: Parin, V. V.; Agadzhanyan, N. A.; Kuznetsov, A. G.; Barer, A. S.; Isabayeva, V. A.; Mirrakhimov, M. M.; Davydov, G. A.; Kalinichenko, I. R.; Korohova, A. A.; Karpova, L. I.; Nikulina, G. A.; Tikhomirov, Yu. P.; Sokol, Ye. A.; Gavrilov, B. A.

ORG: none

TITLE: Establishing the possibility of using alpine acclimatization for the preparation and training of cosmonauts [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 300-302

TOPIC TAGS: hypoxia, high altitude physiology, alpine acclimatization, cosmonaut training

ABSTRACT:

Tasks of the present study were to:

1. Conduct complex physiological and clinical investigations during the process of acclimatization at altitudes of 3300 to 4100 m.

Card 1/4

2. Study the influence of alpine acclimatization on human tolerance to extremal spaceflight factors.

3. Study the comparative resistance of alpine inhabitants, valley inhabitants, and alpinists to extremal factors.

4. Develop a system of alpine acclimatization for cosmonauts and issue recommendations on the application of alpine acclimatization for the preparation and training of cosmonauts and on the creation of alpine camps for cosmonauts.

Acclimatization was conducted at the alpine station of the Kirgiz State Medical Institute (Tuya-Ashu mountain pass, altitude, 3300 to 4100 m). A total of 28 male subjects were studied of whom: 11 were indigenous to alpine conditions as farmers of the Tien-Shan--Pamir region (2000 to 2500 m), 11 were valley inhabitants, and 6 were accomplished alpinists. The following indices were studied under alpine conditions and using test stands: Functional condition of the central nervous system; external respiratory and cardiovascular system function; some biochemical indices; the state of the blood coagulation and anticoagulation capacity; and in separate experiments; cerebral circulation using an electroplethysmographic method.

ACC NR: AT6036616

The experiments showed that after 45 days of alpine acclimatization, human tolerance to prolonged, back-chest accelerations (8 to 10 G) was improved. This was reflected in a relative increase in the amplitude of rheoencephalograms for all subjects and consequently, improved cerebral circulation and lowered pulse rate. EKG changes indicated that the heart was undergoing less strain after alpine acclimatization. After residence in alpine conditions, a decrease in basic metabolic indices and a slight increase in arterial blood oxygen saturation was noted in alpine inhabitants during accelerations.

A study of heat tolerance showed that there was a drop in basic physiological parameters (heat accumulation and basal metabolism) after alpine acclimatization in all three groups. These changes were more pronounced in indigenous alpine inhabitants and less pronounced in alpinists.

The resistance of the organism to hypoxia before and after acclimatization was studied using two approaches; exposure to a certain "altitude ceiling" in a pressure chamber and a method of reverse respiration using a spirograph first filled with atmospheric air. In the latter case as a measure of oxygen consumption, oxygen content under the bell jar of the spirograph decreased and exhaled carbon dioxide was chemically absorbed.

Card 3/4

OKEL'CHENKO, [illegible].N., kand. tekhn. nauk; [illegible]

GAVRILOV, B.F., inzh.

Which should be normalized, mineral losses or their recovery?
[Trudy]VNIIMI no.50:265-266 '63.

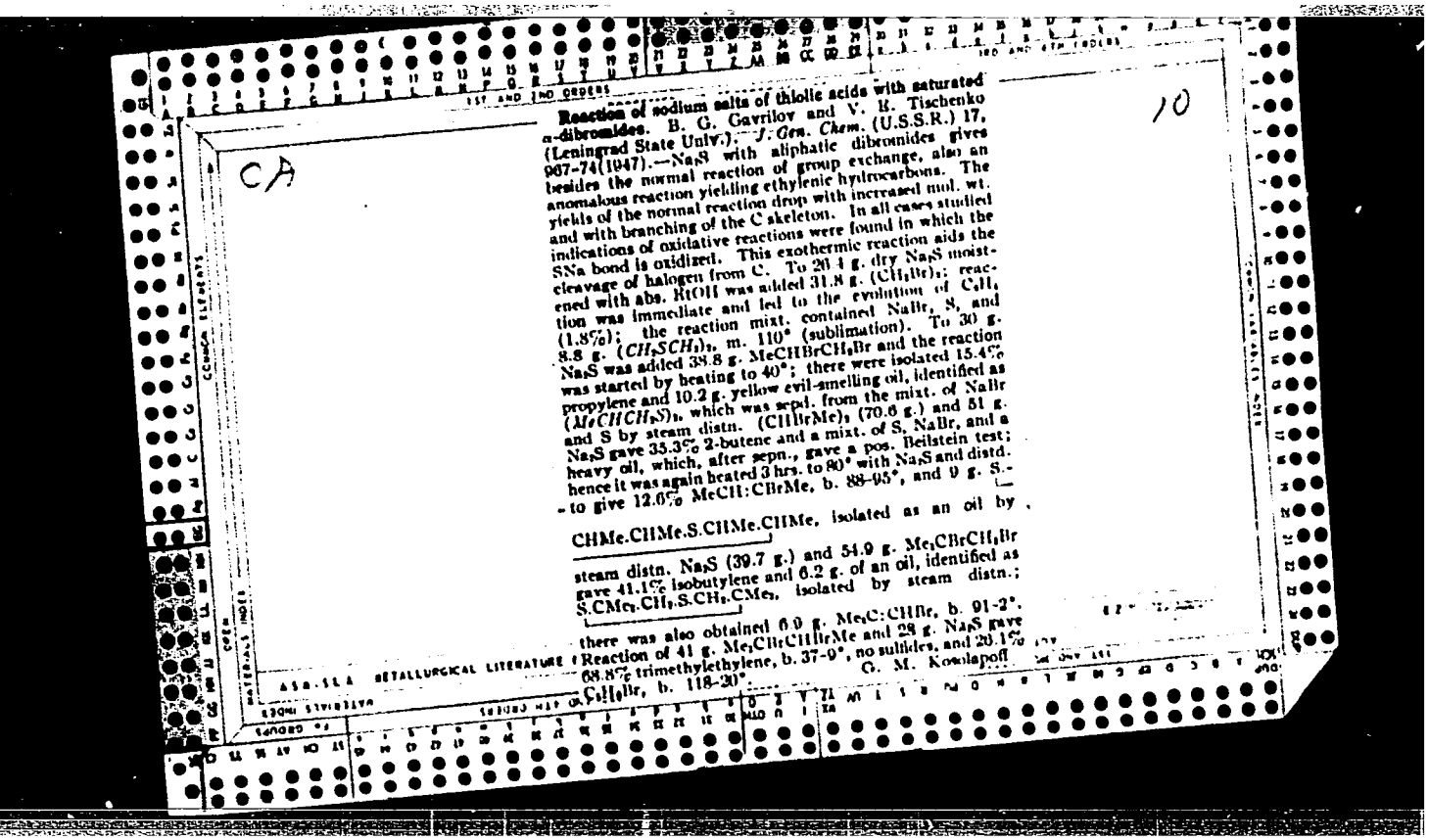
OMEL'CHENKO, A.N.; GLEYZER, M.I.; GAVRILOV, B.F.

Calculation of losses of ore in the mine in induced block caving. Razved. i okh. nedr 29 no.7:44-46 Jl '63. (MIRA 16:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy marksheyderskiy institut.
(Mining engineering)

GLEYZER, M.I., kand. tekhn. nauk; GAVRILOV, B.F., inzh.; VODENIKOV, Yu.N., inzh.

Certain problems in sampling and estimating the average contents of the useful mineral component in the Zyryanovsk Combine lead mines. [Trudy]VNIMI no.50:267-278 '63. (MIRA 17:10)

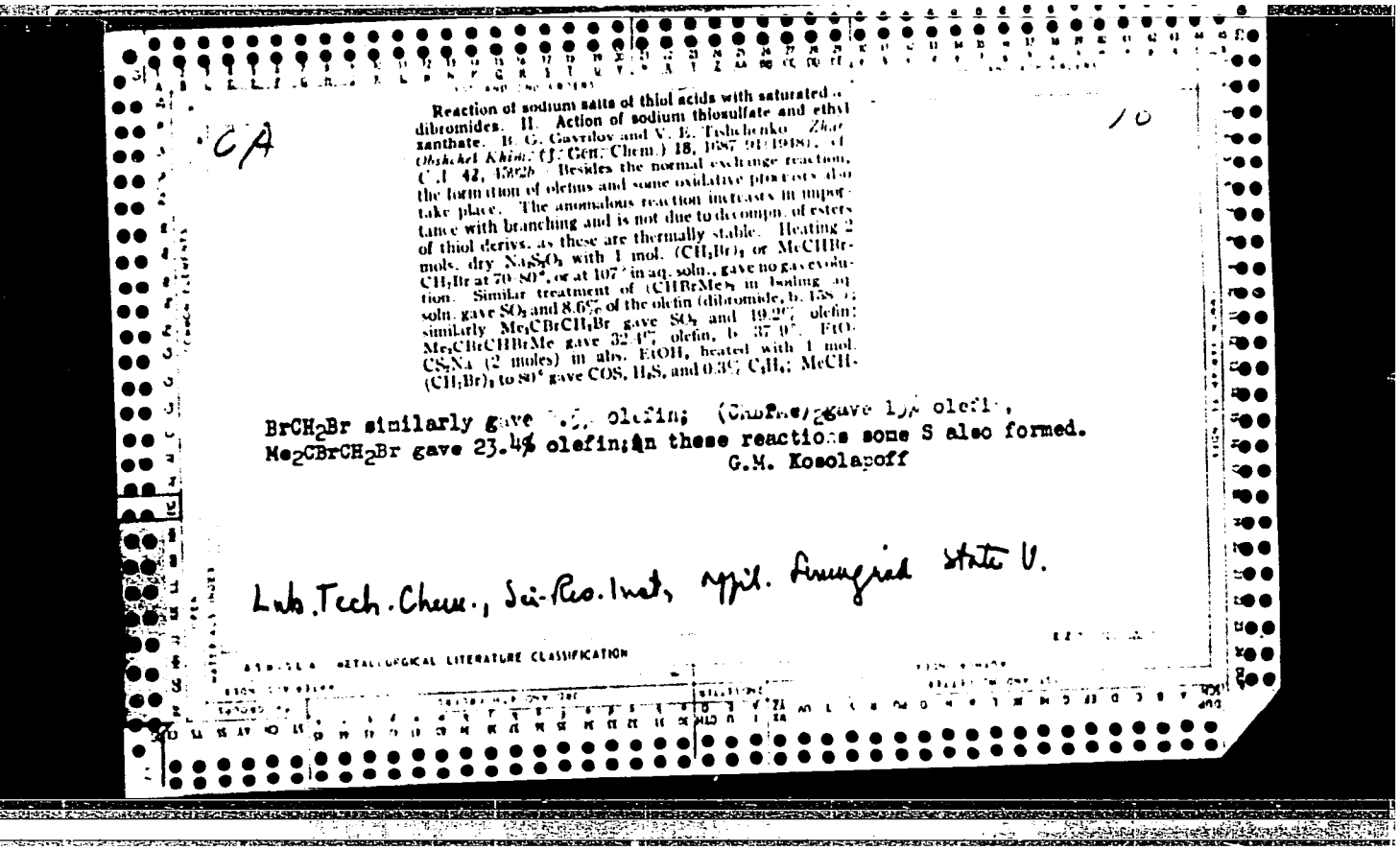


CA

10

Reaction of sodium salts of thiolic acids with saturated α-dibromides. B. G. Gavrilov and V. E. Tischenko (Leningrad State Univ.). *J. Gen. Chem.* (U.S.S.R.) 17, 967–74(1947).—Na_2S with aliphatic dibromides gives besides the normal reaction of group exchange, also an anomalous reaction yielding ethylenic hydrocarbons. The yields of the normal reaction drop with increased mol. wt. and with branching of the C skeleton. In all cases studied indications of oxidative reactions were found in which the SSa bond is oxidized. This exothermic reaction aids the cleavage of halogen from C. To 20.4 g. dry Na_2S moistened with abs. RtOH was added 31.8 g. $(CH_2Br)_2$; reaction was immediate and led to the evolution of C_2H_4 (1.8%); the reaction mixt. contained NaBr, S, and 8.8 g. $(CH_2SCH_2)_2$, m. 110° (sublimation). To 30 g. Na_2S was added 38.8 g. MeCHBrCH$_2$Br and the reaction was started by heating to 40°; there were isolated 15.4% propylene and 10.2 g. yellow evil-smelling oil, identified as $(MeCHCH_2S)_2$, which was sepd. from the mixt. of NaBr and S by steam distn. $(CHBrMe)_2$ (70.6 g.) and 51 g. Na_2S gave 35.3% 2-butene and a mixt. of S, NaBr, and a heavy oil, which, after sepn., gave a pos. Beilstein test; hence it was again heated 3 hrs. to 80° with Na_2S and distd. to give 12.6% MeCH:CBrMe, b. 88–95°, and 9 g. S.-CHMe.CHMe.S.CHMe.CHMe, isolated as an oil by steam distn. Na_2S (39.7 g.) and 54.9 g. Me_2CBrCH_2Br gave 41.1% isobutylene and 6.2 g. of an oil, identified as S.CMe$_2$.CH$_2$.S.CH$_2$.CMe$_2$, isolated by steam distn.; there was also obtained 6.9 g. Me_2C:CHBr, b. 91–2°. Reaction of 41 g. $Me_2CBrCHBrMe$ and 28 g. Na_2S gave 68.8% trimethylethylene, b. 37–9°, no sulfides, and 20.1% C_5H_9Br, b. 118–20°.

G. M. Kosolapoff



CA

10

Reaction of sodium salts of thiol acids with saturated ... dibromides. II. Action of sodium thiosulfate and ethyl xanthate. B. G. Gavrilov and V. E. Tshchenko. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 18, 1687-91 (1948). C.I. 42, 15928. Besides the normal exchange reaction, the formation of olefins and some oxidative processes also take place. The anomalous reaction increases in importance with branching and is not due to decomp. of esters of thiol derivs. as these are thermally stable. Heating 2 mols. dry $Na_2S_2O_3$ with 1 mol. $(CH_2Br)_2$ or $MeCHBrCH_2Br$ at 70-80°, or at 107° in aq. soln., gave no gas evolution. Similar treatment of $(CHBrMe)_2$ in boiling aq. soln. gave SO_2 and 8.6% of the olefin (dibromide, b. 155°); similarly Me_2CBrCH_2Br gave SO_2 and 19.2% olefin; $Me_2CBrCHBrMe$ gave 32.4% olefin, b. 37-9°. EtOH CS_2Na (2 moles) in abs. EtOH, heated with 1 mol. $(CH_2Br)_2$ to 80° gave COS, H_2S, and 0.3% C_2H_4; $MeCH$-

$BrCH_2Br$ similarly gave [illegible] olefin; (CH_2Br_2) gave 1% olefin, Me_2CBrCH_2Br gave 23.4% olefin; in these reactions some S also formed.

G.M. Kosolapoff

Lab. Tech. Chem., Sci. Res. Inst., Appl. Inorganic State U.

[illegible] METALLURGICAL LITERATURE CLASSIFICATION

GAVRILOV, B. G.

32383 DOBRYANSKIY, A. F. i GAVRILOV, B. G. Kataliticheskiye Prevrashcheniya Uglevodorodov Nefti. Nauch. Byulleten' Deningr. Gos. Un-ta im. Zhdanova, No. 23, 1949. s. 13-19 Bibliogr: s. 18-19

SO: Letopis' Zhurnal'nykh Statey, Vol. 44

GAVRILOV, B.G.

DOBRYANSKIY, A.F., professor; GAVRILOV, B.G., dotsent.

Catalytic conversions of petroleum hydrocarbons. Nauch.biul. Len. un. no.23:13-19 '49. (MLRA 10:4)

1. Kafedra tekhnicheskoy khimii.
(Petroleum) (Hydrocarbons)

GAVRILOV, B.G.

Thermal transformations of alkylbenzenes. A. F. Dobryanskii and B. G. Gavrilov. *Uchenye Zapiski Leningrad. Gosudarst. Univ. im. A. A. Zhdanova* No. 155, *Ser. Khim. Nauk* No. 11, 261-9(1952).—Activated gumbrin aluminosilicate catalyst contg. 12.3% Al_2O_3 and 2.95% Fe_2O_3 with 62% SiO_2 after treat ment with 25% H_2SO_4 was employed. Heating this in autoclave with xylene 30 hrs. at 300° gave C_6H_6, PhMe, $Me_2C_6H_4$, $Me_3C_6H_3$, with enrichment of recovered xylene in the *m*-isomer. EtPh gave C_6H_6 and $Et_2C_6H_4$ (mainly meta), while iso-PrPh gave C_6H_6 and iso-$Pr_2C_6H_4$ (*m*- contg. some *p*-isomer). G. M. K.

Kafedra teknicheskiy khimii.

Gavrilov, B. G.

USSR.

Thermocatalytic transformation of alkylbenzenes. B. G. Gavrilov and O. I. Zhgun. *Uchenye Zapiski Leningrad. Gosudarst. Univ.* No. 163, *Ser. Khim. Nauk* No. 12, 177-85 (1953); *Referat. Zhur., Khim.* 1954, No. 11264.—The reaction was studied in the presence of Al silicate catalyst at 360° on toluene and *sec*-butylbenzene and on their equimolar mixt. At 10–21 hrs. of heating in an autoclave under 15-20 atm. in the presence of gumbrin activated with 25% H_2SO_4 and a hydrocarbon-catalyst ratio of 1.7:1, there was observed a migration of radicals and formation of benzene, di- and trialkylbenzenes. From toluene was obtained 1.9% benzene and 1.1% *m*-xylene. From *sec*-butylbenzene was formed 19% benzene, 28% *m*-di-*sec*-butylbenzene and 2.7% 1,3,5-tri-*sec*-butylbenzene. From the mixt. was obtained approx. 8.8% *m*-*sec*-BuC$_6$H$_4$Me. M. Hoseh

Kafedra tekhnicheskoy khimii Khimicheskogo fakul'teta LGOLU.

GAVRILOV, B.G.

4

Transformation of [illegible] over natural alu-
minosilicates. B. G. Gavrilov and [illegible]. *Uch-*
enye Zapiski Leningrad. Gosudarst. [illegible] A. A. Zhdanov
No. 169, *Ser. Khim. Nauk* No. 13, [illegible] (1953).—Refluxing
activated aluminosilicate with 4-bromo-*m*-xylene gave 34%
conversion of the latter to xylenes and dibromoxylenes. 3-
BrC_6H_4Et similarly gave EtPh and $Br_2C_6H_3Et$; there are
also formed PhBr and $Et_2C_6H_3Br$. The mobility of group
appears to be in increasing order Me, Et, Br. [illegible]

GAVRILOV, B.G.

V Thermocatalytic transformations of alkylnaphthalenes. B. G. Gavrilov and S. F. Pushnoi. *Uchenye Zapiski Leningrad. Gosudarst. Univ. im. A. A. Zhdanova* No. 169, *Ser. Khim. Nauk* No. 13, 210-19(1953).—Heating $EtC_{10}H_7$ to 230–40° with activated gumbrin aluminosilicate at atm. pressure gave $C_{10}H_8$, $Et_2C_{10}H_6$, and $Et_4C_{10}H_4$. At 275° and 20–30 atm. more drastic changes take place forming, tetrahydronaphthalene, EtPh, C_4H_{10}, and $(C_{10}H_7)_2$. The source of H for hydrogenation appear to be the tarry materials formed from condensation of aromatic rings. Thus the translocation of Et radicals is apparently a reversible reaction. The results appear to support the hypothesis of natural modification of petroleum by const. simplification of structure of the petroleum mass, with internol. hydrogenation.

G. M. Kosolapoff

GAVRILOV, B. G.

USSR/Chemistry - Catalytic conversion

Card 1/1 Pub. 151 - 22/38

Authors : Gavrilov, B. G., and Nikitina, E. N.

Title : Thermocatalytic conversions of butylnaphthaline

Periodical : Zhur. ob. khim. 24/2, 303-307, Feb 1954

Abstract : Thermocatalytic conversion of mono- and di-secondary-butylnaphthalins over a natural aluminum silicate catalyst was investigated. In addition to the reactions leading to the displacement of the immutable fatty radicals, which are typical for alkylbenzenes, numerous other reactions were also observed. The most characteristic of these reactions were the formation of diethylbenzene, tetrahydronaphthalin, dinaphthyl and butane which take place through the over-distribution of hydrogen, and the formation of octane (3,4-dimethylhexane) due to the combination of butyl radicals. The results obtained confirm the general law regarding the processes of petroleum conversion in nature: aromatic hydrocarbons → naphthene hydrocarbons → methane hydrocarbons. Nine references: 1-English and 8-USSR (1928-1953). Tables.

Institution : The A. A. Zhdanov State University, Leningrad

Submitted : September 5, 1953

Gavrilov, B.G.

132

Thermal stability of alkane hydrocarbons. B. G. Gavrilov and L. S. Bagrat'yan (*Zh. obshch. Khim.*, 1950, 20, 1483—1487).—n-Pentane, n-hexane, n-heptane, n-octane, n-nonane, 2 : 2 : 4-trimethylpentane, 3-methylheptane and 3-methyloctane showed initial decomposition temp. (I) of 270—275°, 230—235°, 210—215°, 195—200°, 185—190°, 295—300°, 210—215° and 200—205° respectively. I in ordinary conditions for n-paraffinic hydrocarbons was lower than corresponding temp. of their *iso*-analogues; n-hydrocarbons showed decreasing I with increasing mol. wt. Degree of branching is correlated with thermal stability and similarly the octane numbers of hydrocarbons investigated and their thermal stabilities are directly related. A. L. B.

GAVRILOV, B. G.

1-11N
4E3d
4E4j

Thermal stability of methane hydrocarbons. B. G. Gavrilov and L. S. Marmat'yan. *J. Gen. Chem. U.S.S.R.* 26, 1777-8(1950)(English translation).—See *C.A.* 51, 18114. B. M. R.

4

GAVRILOV, B. G.

6

Low-temperature oxidation of methane hydrocarbons. B. G. Gavrilov and G. V. Zinov'eva (State Univ., Leningrad). Zhur. Obshchei Khim. 26, 2289-91(1956).—Oxidations of a variety of hydrocarbons by percolation with O at 55° 100 hrs. under ultraviolet irradiation gave the following results [% yields (expressed as O content) of hydroperoxides, carboxylic acids, and water and alcs., % total active H, % carbonyl compds. (as O content), and % total added O given]: n-hexane 0.03, 0.07, 1.85, 1.13, 1.83, 3.77; 2,3-dimethylbutane 0.21, 0.49, 2.0, 0.157, 2.00, 4.77; n-heptane 0.01, 0.11, 3.97, 0.25, 0.95, 4.88; 2-methylhexane 0.09, 0.27, 4.61, 0.3, 1.31, 6.28; n-octane 0.03, 0.05, 2.87, 0.18, 0.06, 3.91; 2,5-dimethylhexane 3.04, 0.32, 2.97, 0.29, 0.4, 0.73; 2,2,4-trimethylpentane 0.02, 0.04, 1.37, 0.09, 0.14, 1.58; n-nonane 0.02, 0.07, 1.2, 0.07, 0.4, 1.7.
G. M. Kosolapoff

Gavrilov, B. G.

Distr: 4E4j/4E3d/4E2c(j) 7

Thermocatalytic reactions of alkylbenzenes (amyl- and hexylbenzene). B. G. Gavrilov and R. A. Ten. *Uchenye Zapiski Leningrad. Gosudarst. Univ. im. A. A. Zhdanova* No. 211, *Ser. Khim. Nauk* No. 15, 172-8(1957).—Isoamylbenzene (I) when heated in autoclave in presence of aluminum silicate as catalyst yielded diisoamylbenzene and benzene at the b.p. of I. At 200-30° there was a side reaction in which benzene and isopentane were formed. Under similar conditions hexylbenzene yielded a mixt. of 2- and 3-methylpentanes, indicating a degradation of starting material.

V. S. Mikhailov

4/2 may 3 1/1

GAVRILOV, B. G.

7

1-HEBC
1-H/V
1-4E4

Thermal decomposition of hydrocarbons and their detonation properties in internal-combustion engines. B. G. Gavrilov. *Zhur. Prikład. Khim.* 30, 763-7(1957).—The initial temp. of decompn. of hydrocarbons passing through a heated quartz tube and the rate of liquid phase oxidation with O (activated with ultraviolet light at 50°) were detd. The thermal stability of hydrocarbons decreased from pentane to nonane. The isoparaffins were more stable than their normal analogs and were more readily oxidized. The most stable, thermally, and the least oxidizable was 2,2,4-trimethylpentane (isooctane). I. Bencowitz

SRH

GAVRILOV, B.G.

3
1- 4E4j
1- 4E3d
1-4E2c(
2-M

Thermocatalytic conversion of alkylnaphthalenes (isoamylnaphthalene). B. G. Gavrilov and N. Kim. Zhur. Priklad. Khim. 30, 963-7(1957); cf. C.A. 49, 14715. — Heating 2-$C_{10}H_7CHEt_2$ with twice its wt. of activated (dil. HCl) native aluminosilicate 10 and 15 hrs. in an autoclave at 250 and 275 ± 5° under 11 and 12 atm. yielded 0.83 and 1.15% pentane, 34.31 and 39.8% $C_{10}H_8$, 32.46 and 27.6% $C_{10}H_7Am$, and 9.62 and 10.85% $C_{10}H_6Am_2$. The yield of the same products after refluxing 5 hrs. at atm. pressure and 260° was 1.1, 35.2, 39.6, and 10.4%, resp. From $C_{10}H_6Am_2$, heated in an autoclave 11 hrs. at 275°, the yields were 1.06, 16.51, 20.3, and 30.75%. The unaccountable losses in the 4 expts. were 11.23, 8.25, 9.00, and 11.85%. The formation of C_5H_{12} and $C_{10}H_8$ could be accounted for only by internal hydrogenation (cf. loc. cit.). I. Bencowitz

MB

GAVRILOV, B.G.; ALTUKHOV, K.V.

Oxidizing properties of alkylnaphthalenes. Izv. vys. ucheb. zav.; neft' i gaz no. 5:93-95 '58. (MIRA 11:8)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova.
(Naphthalene)
(Oxidation)

GAVRILOV, V.G.; VELICHKO, S.A.

Effect of the preliminary thermal destruction on oxidizability of methane hydrocarbons. Zhur. ob. khim. 28 no. 8:2100-2101 Ag '58. (MIRA 11:10)

1. Leningradskiy gosudarstvennyy universitet.
(Methane)
(Oxidation)

AUTHORS: Gavrilov, B. G., Buzanov, M. I. SOV/79-28-10-20/60

TITLE: Thermocatalytic Transformations of ∝-Methyl Naphthalene (Termokataliticheskiye prevrashcheniya ∝-metilnaftalina)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10, pp 2723-2724, (USSR)

ABSTRACT: The decomposition of alkyl naphthalene at a higher temperature is of interest for the chemical nature of the cracking process of hydrocarbons (Ref 1). The transformations of the alkyl naphthalenes at lower temperature and with activated loams offered some very interesting reactions of these hydrocarbons that are in direct relation to the transformations of petroleum in nature (Refs 2, 3). The ∝-methyl naphthalene was used for the experiments. 400 gr of it were heated in the autoclave with the same quantity of activated loam ("Gumbrine") at 350° for 8 hours with the pressure increasing to 31 atmospheres absolute pressure; 8 m^3 gas of the following composition were obtained:

Card 1/3

The specific weight was 0,000723 gr/cm^3. The liquid product of the catalysis was extracted together with the catalyst by benzene. After the solvent had been driven off the fractions mentioned in the table were separated by distillation. The transformation of α-methyl naphthalene amounted to 69,2 %. The β-methyl naphthalene fraction was oxidized with 5 % nitric acid into the β-naphthoic acid. After filtration and re-crystallization a compound was obtained that had a melting point of 180,5°. The final products were methane, naphthalene, β-methyl naphthalene, dimethyl naphthalene, and dinaphthyl. The formation of naphthalene and dimethyl naphthalene is explained by the reaction $2C_{10}H_7CH_3 \longrightarrow C_{10}H_8+C_{10}H_6(CH_3)_2$, which is normal under these conditions. The results of the experiments prove the mechanism of the petroleum processes in the earth, which on the one hand points to the simplification of the petroleum material to the methane, and on the other hand to the complex formation of the highly condensed hydrocarbon. There are 1 table and 3 references, 3 of which are Soviet.

Thermocatalytic Transformations of α-Methyl Naphthalene SOV/79-28-10-20/60

ASSOCIATION: Leningradskiy gosudarstvennyy universitet
(Leningrad State University)

SUBMITTED: July 29, 1957

Card 3/3

5(3) SOV/54-59-1-15/25

AUTHORS: Gavrilov, B. G., Vol'nova, I. S

TITLE: A Study of the Equilibrium of Reactions of Radical Displacements of the Isopropylbenzene (Izucheniye ravnovesiya reaktsii peremeshcheniya radikalov u izopropilbenzola)

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1959, Nr 1, pp 107-111 (USSR)

ABSTRACT: Some equilibriums of reactions of radical displacements at hydrocarbons in dependence on temperature, duration of reaction, and the presence of various catalysts have already earlier been investigated (Refs 1-7). These investigations are apt to supply a number of indications concerning the formation process of petroleum in nature. The equilibrium of reactions of radical displacements at the isopropylbenzene was therefore investigated. Aluminum silicate activated by HCl was used as a catalyst The isopropylbenzene used exhibited the following indices: boiling point = 152-153°, d_4^{20} = 0.8580, n_D^{20} = 1.4921. Investigation results are given in table 1, which shows the values of the indices at various heating periods and at various temperatures in the

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range of from 152-250°. In all investigations two reactions were observed: the chief reaction $2C_6H_5C_3H_7 \rightleftharpoons C_6H_6 + C_6H_4(C_3H_7)$ and the secondary reaction $2C_6H_4(C_3H_7)_2 \rightleftharpoons C_6H_5C_3H_7 + C_6H_3(C_3H_7)_3$. The equilibrium in the chief reaction was attained after thirty-minute heating. In the secondary reaction also triisopropylbenzene was observed besides diisopropylbenzene. The equilibrium constant was computed for the reactions. The expression found for the temperature dependence of the equilibrium constants in the temperature range of from 175-250° has the following form: $\lg K_p = \frac{5840}{4.576\ T} - 2.1832$. There are 2 figures, 2 tables, and 7 Soviet references.

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AUTHOR: Gavrilov, B. G.

TITLE: The Oxidation of Olefins in Liquid Phase (Zhidkofaznoye okisleniye olefinov)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, 1959, Nr 3, pp 75-77 (USSR)

ABSTRACT: An investigation was carried out of hexene-1, heptene-1, octene-1 (produced by dehydrogenation of the corresponding primary alcohols over active aluminium oxide at 330-340°), further 2-methyl hexene-2 and 2,5-dimethyl hexene-2 (produced by reaction of acetone with butyl magnesium bromide and isoamyl magnesium bromide respectively and dehydrogenation of the obtained alcohols by boiling with iodine). Oxidation of all olefins was carried out under the same conditions at 50° C by means of oxygen in ultraviolet light. In the oxidized hydrocarbons the hydroperoxydes were stannometrically determined, the acids titrimetrically, the active hydrogen according to the method by Terent'yev and the determination of the carbonyl compounds was carried out according to the method with the Beckmann-spectrophotometer. In the case of normal olefins C_6 - C_8 oxidizability decreases according to the

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homologue series; it is, however, higher than that of the saturated hydrocarbons. The iso-olefins are more easily oxidizable than their n-analogues. An unexplicable phenomenon remains the high octane number of all olefins as compared to their saturated analogues. It is most probable that the primary process of detonation is not oxidation, but a thermal destruction of the hydrocarbon molecules. As the olefins are more thermostable due to their double bond, in spite of their more easily achieved oxidizability, they have a lesser tendency towards destruction and consequently also towards detonation. There are 3 tables and 5 references, 3 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova (Leningrad State University imeni A. A. Zhdanov)

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GAVRILOV, B.G.; ROGOZINA, Ye.A.

Low-temperature oxidation of alkyl benzenes. Izv.vys.uchab. zav.; neft' i gaz 2 no.11:95-97 '59. (MIRA 13:4)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.
(Benzene)

GAVRILOV, B.G.; VOL'NOVA, I.S.

Investigation of the equilibrium of the radical displacement reaction in isopropylbenzene. Vest.LGU 14 no.4:107-111 '59. (MIRA 12:5)

(Cumene) (Radicals (Chemistry))

AUTHORS: Gavrilov, B. G., Andreyeva, L. P.

TITLE: Thermal Conversions of Isomeric Xylenes Over Clays

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 9, pp 2983-2986 (USSR)

ABSTRACT: This article deals with the study of thermo-catalytic conversions of isomeric xylenes over clays. The experiments were conducted over activated clay (gumbrin) at 300° C and 30 atm. The heating time was 10 hr. Amounts of the reaction products were determined by means of infrared absorption spectra in the 700-800 cm^{-1} range. Toluene and mesitylene were determined by specific weight, boiling temperature, and refraction coefficient. Results of the conversions are: for o-xylene

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Table 1.

Key to Table 1: (1) fraction; (2) hydrocarbon; (3) yield, (in %); (4) narrow fraction temperature (5) residue; (6) losses; (7) benzene; (8) toluene; (9) xylenes; (10) mesitylene.

(1)	(2)	(3)	(4)	d_4^{20}	n_D^{20}
79—80° . . .	(7)	0.25	79.4°		1.5002
107—110 . . .	(8)	16.5	108.4—109	0.8657	1.4959
130—150 . . .	(9)	37.8	135—145		
163—164 . . .	(10)	8.45	163.6—163.9	0.8663	1.5040
(5)		1.45	—	—	—
(6)	—	5.55	—	—	—

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for m-xylene

Table 2.

Key to Table 2: (1) fraction; (2) hydrocarbon; (3) yield, (in %); (4) narrow fraction temperature; (5) residue; (6) losses; (7) benzene; (8) toluene; (9) xylenes; (10) mesitylene.

(1)	(2)	(3)	(4)	d_4^{20}	n_D^{20}
79—80°	(7)	0.2	79.2°	—	1.5000
107—110	(8)	12.9	108.5—109	0.8650	1.4955
130—150	(9)	71.2	135.5—145	—	—
163—165	(10)	9.90	164.5—165.0	0.8637	1.5037
(5)	—	0.2	—	—	—
(6)	—	5.6	—	—	—

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for p-xylene

Table 3.
Key to Table 3: (1) fraction; (2) hydrocarbon; (3) yield, (in %); (4) narrow fraction temperature; (5) residue; (6) losses; (7) benzene; (8) toluene; (9) xylenes; (10) mesitylene; (11) durene.

(1)	(2)	(3)	(4)	d_4^{20}	n_D^{20}
79—80°	(7)	0.2	79.6°	—	1.5000
110—112	(8)	14.5	110.5—111	0.8652	1.4955
130—150	(9)	61.3	145 —144	—	—
162—164	(10)	13.0	163.5—163.8	0.8644	1.5040
188—191	(11)	3.1	189.5—190	—	—
(5)	—	0.3	—	—	—
(6)	—	7.6	—	—	—

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Thermal Conversions of Isomeric Xylenes Over Clays

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Because of ease of the conversion and simplicity of product separation, this method can be used to obtain toluene, isomeric xylenes and polymethyl benzenes. The above conversions also apply to hydrocarbons with more complex radicals (up to amyl), since the reaction occurs because of splitting-off and migration of a paraffin radical. There are 3 tables; 3 figures; and 11 references, 8 Soviet, 2 U.S., 1 U.K. The 3 U.S. and U.K. references are: L. R. Herndon, E. E. Reid, J. Am. Chem. Soc., 50, 3066 (1928); C. C. Cannon, G. B. B. M. Sutherland, Spectroch. Acta, 4, 373 (1951); C. W. Young, R. B. Du Vall, N. Wright, Analyt. Chem., 23, 5 (1951).

ASSOCIATION: Leningrad State University (Leningradskiy gosudarstvennyy universitet)

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77653
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AUTHORS: Gavrilov, B. G., Gulin, Ye. I., Lesnikov, A. P., Tarasov, A. K.

TITLE: Preignition Conversion of Methane Hydrocarbons in Internal Combustion Engines

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 2, pp 421-424 (USSR)

ABSTRACT: The preignition conversion of paraffins (n-hexane, n-heptane, n-octane, 2,3-dimethylpentane, 2,2,3-trimethylbutane, and 2,2,4-trimethylpentane) were investigated in a one-cylinder Waukesha engine with adjustable compression ratio. The engine was heated up by running normally on B-70 gasoline; the ignition and the gasoline supply was then cut off and the flywheel turned by an electric motor until a predetermined upper temperature was reached. The supply of the investigated hydrocarbon was then turned on, the gaseous mixture of the hydrocarbons with air was aspired into the cylinder,

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